

PERCEPTIONS OF PARTICIPANTS IN A MULTI-SITE DISTANCE LEARNING BACHELOR OF SCIENCE DEGREE PROGRAM

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Abstract: The purpose of this study was to determine student's perceptions of distance education courses taken during a Bachelor of Science degree program designed for adult off-campus students. The following factors were examined:

1. Student learning – self-rated levels of learning and understanding of content.
2. Instructional techniques – instructor's use of lecture, handouts and visuals; instructor's ability to encourage students to participate and reflect.
3. Medium – how the technology affects the pace of the class, the quality of transmission and how different sites interact.
4. Attitude – self-rated feeling about preferences for distance education instruction.
5. Possible uses of distance education – students' view of future uses of distance education.

INTRODUCTION

“Distance education can best be described as the separation of student and instructor during the process of education delivery” (Swift, Wilson, & Wayland, 1997, p. 1). Distance education allows students to be in different geographic locations and receive instruction from the teacher at the same time.

Steiner (1999) identified the defining elements of distance education as “the separation of teacher and learner during at least a majority of each instructional process and the use of educational media to unite teacher and learner and carry course content” (p. 1).

Many distance education programs are designed to meet the needs of the non-traditional adult learner. The proportion of college students who are adult learners has been increasing steadily, with projections of over 50% by the millennium. Fewer than one in six undergraduates fit the traditional stereotype of the American college student – 18-22 years of age, attending college full-time, and living on campus (Griffiths & Gatien, 1999). The majority of distance education students are working adults seeking advanced degrees. Approximately 85% of the adult learners work.

PURPOSE

The purpose of this study was to determine student's perceptions of distance education courses taken during a Bachelor of Science degree program designed for adult off-campus students.

The following factors were examined: Student learning – self-rated levels of learning and understanding of course content; Instructional techniques – instructor’s use of lecture, handouts and visuals, instructor’s ability to encourage students to participate and reflect; Medium – how the technology affects the pace of the class, the quality of transmission and how different sites interact; Attitude – self-rated feeling about preferences for distance education instruction; and Possible uses of distance education – students’ view of future uses of distance education

PROCEDURES

Twenty-seven students who completed eight distance education classes hosted by a major university were selected to participate in this study. The technology provided a voice-activated two-way video/audio transmission. Each site was equipped with a local and a remote monitor. Seven sites were used, and they were all located within the state.

The class size ranged from one student to eight. Questionnaires were mailed to each student who participated in the program. The researcher did not know or have knowledge of any student name, only their assigned number.

Participants. Participants for this study were students enrolled in a bachelor’s program for vocational education. Five professors were the primary instructors in the program. Topics of courses covered were: Advanced Strategies in Technical Education, Analysis of Teaching in Technical Education, Curriculum Selection and Selection of Use in Technical Education, Surveying Special Student Populations in Technical Education, Use of Student Resources in Technical Education, Advanced Management in Technical Education Programs, Current Trends and Issues in Technical Education, and Tech Prep in Technical Education. Of the 27 students enrolled in the program, all participated in the study. A total of 27 usable questionnaires were returned for a response rate of 100%. Of the 27 students enrolled, 7 were female and 20 were male. Ages ranged from 25 to over 55 with the majority in the 45-54 age group.

All participants were working full time in technical positions at vocational technical colleges. They taught in such areas as automotive technology, computer technology, culinary arts, diesel technology, electronics technology, machine technology, and nursing.

This program was part of a three-year project funded by the State Department of Higher Education. Participants were required to complete the necessary coursework to obtain a bachelor of science in vocational education. Most students received reimbursement for tuition from the state department of higher education.

INSTRUMENT

A 42-item questionnaire, adapted from Treagust, Waldrup, and Horley (1993), was used to measure attitudes and perceptions of distance education undergraduate students. Permission to use the questionnaire was obtained from David Treagust (personal communication, November 13, 1995). Students were asked to rate their perceptions of student learning, instructional techniques, medium, attitudes, and possible uses of distance education using a five-point Likert scale.

DATA ANALYSIS

The data was analyzed using the SPSS for Windows statistical software package. Mean score and frequency calculations were compiled for the following five factors: student learning,

instructional techniques, medium, attitude, and possible use. Variables of interest were: age, gender, size of class, and number of distance education classes completed.

RESEARCH FINDINGS

On a five-point Likert scale, possible uses of distance education was rated the highest followed by medium, attitudes, instructional techniques, and student learning.

Gender. When examining factors by gender, females rated all five factors higher than males. Of the five factors, student learning had the greatest difference between mean scores by males and females, followed by instructional techniques and distance education medium. The least differences were attitudes and possible uses of distance education.

Age. The students ranged from 25 years of age to over 55 years with the majority of students in the 45 – 54 age group. The student over 55 years of age had a slightly more positive attitude than other students.

Size of class. At the seven remote sites, class sizes ranged from 1 to 9 students.

Minimal differences are observed in the mean score for the factors.

Number of distance education classes completed. The more classes completed, the more positive the attitudes of the students were. However, no differences were found in the area of instructional techniques.

The statement “Distance education provides opportunities to do courses that may not be normally available” received the highest rating on the questionnaire with a mean of 4.7. The statement with the lowest mean score (3.3) was “Distance education has had no effect on my learning in the classes.”

DISCUSSION

Overall, the perception in all five factors (student learning, instructional techniques, medium, possible uses of distance education and attitude) was positive with possible uses of distance education having the highest mean score. Participants felt positive about distance education after having been involved in the program. Students continued to take additional courses in the program.

Distance education programs are an effective means of communication to offer courses at geographic locations that would not otherwise be possible without the long travel time of instructors and students. Offering courses at a distance provides an opportunity for students in rural areas to take courses from an institution of higher education. It is not surprising that these students would have a positive attitude toward distance education.

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